

**IS THERE A LINK BETWEEN INCREASED GROWTH  
AND REDUCED INCOME INEQUALITY?:  
ANALYSIS OF CROSS-COUNTRY STUDIES**

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*"No society can surely be flourishing and happy, of which by far the greater part of the numbers are poor and miserable".*

*Adam Smith (as quoted in Todaro 1994:131)*

**Abstrak**

Hubungan antara pertumbuhan ekonomi dan kesenjangan pendapatan selalu menjadi perdebatan. Perdebatan ini selalu muncul dengan pertanyaan, apakah ada hubungan antara meningkatnya pertumbuhan ekonomi dengan menurunnya kesenjangan pendapatan. Essai ini mereviu perdebatan ini melalui studi pengalaman beberapa negara dan menganalisis apakah ada hubungan antara pertumbuhan dan kesenjangan di negara-negara tersebut. Namun demikian, diskusi yang disampaikan tidak hanya mencakup analisis apakah ada hubungan tersebut atau tidak, tetapi juga yang lebih penting adalah penekanan terhadap kesenjangan dalam masyarakat yang paling miskin. Ini berarti bahwa, mencari mekanisme untuk meningkatkan kondisi "si miskin" menjadi lebih baik, sehingga dapat menurunkan kesenjangan antara golongan miskin dengan kaya yang pada akhirnya dapat mewujudkan pemerataan pendapatan yang lebih baik. Dalam essai ini juga dipresentasikan usulan kebijakan yang menekankan pada kebijakan ekonomi yang menjadikan penduduk miskin sebagai target kebijakan.

*Kata kunci: Pertumbuhan ekonomi, kesenjangan pendapatan*

**A. Introduction**

The relationship between the level of income and income distribution has been discussed for a long time ago among many scholars. Debates between them have come up with much evidence in

most countries in the world, which have experienced high-income growth but still have a problem with inequality of income distribution.

The persistence of this problem is true if we have a look at the measurement of

income distribution inequality traditionally by using a Gini coefficient or a Gini index. This index shows that many countries that have experienced with Gini index above 40 during the 1980s - 1990s, especially for developing countries, or even above 50 for most countries in Latin America (World Bank 2000). It means that the level of inequality in those countries is still high even though in fact, the economic growth in this part of the world has increased rapidly, above 6 percent per year (World Bank 2000). For example, Korea and Indonesia experienced rapid growth in the 1980s but there was little change in inequality, while China and Russia experienced large increases in inequality during the same period (World Bank 2001).

However, some scholars argue causality that it is not growth which affects inequality but the inequality itself is a necessary condition to encourage growth (Clarke 1992). Adelman and Robinson (1989: 951) state, 'it has been argued that inequality is necessary for accumulation and that it therefore contains the seeds of eventual increases in everyone's income'. In contrast, Alesina and Rodrik (1991) and Persson and Tabellini (1990) argue that "inequality actually slows growth" (cited in Clark 1992: 1).

From these arguments, the concept of relationship is not only to answer the question, is there a link between increased growth and reduced income

inequality, but also how does the role of inequality on growth.

A study of the relationship between inequality and growth through cross-country evidence is really needed. Based on many studies, there have been always contrary arguments. Therefore, this essay will discuss whether there is a link between increased growth and reduced income inequality. This paper also tries to argue that although there is little correlation between growth and inequality of income distribution, perhaps through indirect mechanism like distributional dynamics economic growth will give an opportunity for poor people to participate in the economy. It will encourage the reduction of the poor - rich gap and finally reduce inequality of income distribution.

In discussing this issue, this essay is organized as follows. Firstly, it will review development of growth and distribution theories. Secondly, it will present the empirical debates on growth and inequality. In a belief that the discussions should not only come up with the debates, however, it will be important then, to present some policy suggestions as well as the conclusion.

## **B. Development Of Income**

### **Distribution And Growth Theories**

The development of income distribution and growth theories has concerned by many economists since the classical period, such as David Ricardo

and Karl Marx (Ferreira 1999). In the 1950s, the development of this theory was done by Arthur Lewis and Simon Kuznets. Lewis's model of growth emphasized on the movement of a production factor (labor) from a low productivity sector to a higher productivity one that was basically different from Solow's (Ferreira 1999).

On the other side, Kuznets observed that the relationship between inequality and growth (in terms of income per capita) can be drawn as an 'inverted U curve'. This shows that inequality would first go up in the initial income period when people have started to move across sector and go down after most people have stayed in the new sector (Ferreira 1999). This hypothesis has been very popular among economists and attracted much interest to examine it.

Perhaps 'the most popular' growth theory people have followed is Solow's model. Unlike other models, the distributional scheme to achieve stable growth was not discussed in this model. Solow's model, often called 'neoclassical growth theory', explains much more of the productivity of factors of production, labor and capital. In this model, population growth rate keeps constant and there is no technological progress in the economy. These assumptions become the weaknesses of this model. As this model doesn't discuss about technological progress, some economists

such as Romer (1986) and Lucas (1988) come up with a model based on the assumption that technical progress force positive per capita income growth in the economy (cited in Ferreira 1999:2).

Furthermore, if we continue in our discussion about economic growth, we will come to the Harrod Domar theory that put the emphasized the relationship between capital stock and output where 'any net additions to the capital stock in the form of new investment will bring about corresponding increases in the flow of national output' (Todaro 1994:70). But the discussion should come up not only with growth theory but also the theory behind growth and the inequality relationship. This will bring us to study the empirical debates in reexamining the relationship between growth and inequality.

### **C. Empirical Debates**

The first debate that has become interesting is in examining the Kuznets hypothesis. As was mentioned before, Kuznets hypothesis said there was increased inequality in the period of initial growth in the agricultural society (he defined like this to show people in the low-income level). When the society had moved to the new sector, industrialized sector, the inequality tended to decrease. This hypothesis was drawn as an 'inverted U curve' as in the figure below.

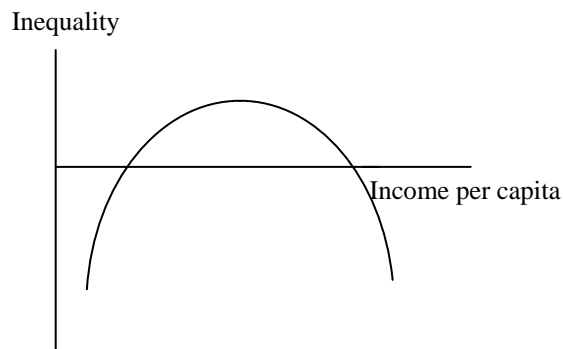


Figure 1. A Stylized Kuznets Curve (Ferreira, 1999)

This hypothesis was concluded based on Kuznets' time series study for England, Germany and the United States. He found that during the observation period in the 1950s, inequality was increasing at the beginning of this period (initial growth level) and after that was falling.

However, this hypothesis seems doubtful and less convincing for recent observations in relation with the broader variables to examine the relationship between growth and inequality and some scholars refute this hypothesis. Some explanations based on empirical study have results supporting the argument that there is a negative relationship between growth and inequality of income distribution. One of the studies was done by Nancy Birdsall, David Ross and Richard Sabot (1995) found that in the East Asian countries the rapid economic growth was also followed by relatively low levels of income inequality. For example, their study showed that income

inequality in most East Asian countries from 1965 to 1989 was on average about 2-4 percent when economic growth had reached the point above 5 percent. They argued based on the fact that those countries in this region have policies which emphasized human capital investment in terms of education.

Additionally, it is important to extend the analysis on whether inequality would effect growth or not. Based on cross-country empirical studies, Clark found that inequality is negatively correlated with long run growth (Clark 1992). This finding is supported by Deininger and Squire (1997). They found little systemic relationship between overall growth and changes in equality at the bottom quintile of population but a strong relationship in the poorest quintile. It might be said that growth positive effect would less than worsening inequality.

Besides that, this result is also supported by Benabon (1997) who also found through his cross-country empirical

study on 13 countries in the 1990s that there was a negative association between growth and income distribution. Meanwhile, Persson and Tabellini (1994) and Alesina and Rodrik (1994) argued empirically that the negative relationship happens in the initial inequality period.

Furthermore, the extended study done by Birdsall and Londono who counted capital as a factor of production, summarized that '...initial inequalities in the distribution of land and human capital have a clear negative effect on economic growth and the effects are almost twice as great for the poor as for population as a whole' (1997: 35). Finally, the empirical result from Ravallion and Chen (1997) found that there was obviously a significant negative correlation between economic growth and changes in inequality. It means that growth reduces inequality rather than contributing to increase in it.

One of the reasons for this argument is that some countries have policies which have promoted the share of economic growth's benefits such as dynamic agricultural sector promotion, labor demand and export oriented growth. Besides that, inequality in the initial stage of development will force the improvement of human capital accumulation which finally supports economic growth.

Conversely, there are some results which show that there is no relationship

between growth and income inequality or, in other words the increasing economic growth does not guarantee an increase of income distribution. The first strong argument comes from Field's empirical study (1989). He proposed some hypotheses about the relationship between growth and income inequality and tried to examine them. He proved that there is no relationship between the change in inequality and the rate of economic growth (the Pearson correlation coefficient was -0.16, not significantly different from 0). Secondly, he conclude that 'inequality need not increase with rapid economic growth and also inequality in the distribution of income is not a force behind economic growth' (Field 1989: 173). In addition, he also suggested that increasing growth is not responsible for more unequal income distribution. The last thing that he found in his research is that there is no evidence for reducing inequality after increasing it in the initial economic growth stage. In other words, he refuted Kuznets hypothesis.

Moreover, the World Bank states that 'on average growth is not correlated with an increase in inequality' (World Bank 2000: 1). Indeed, this organization also said that the condition are not necessarily the same as those for income inequality to be decreased. It seems that the theory of the trickle down effect has never been applicable.

Table 1. Descriptive statistics by major regions

Region		1966-70	1971-75	1976-80	1981-85	1986-90
East Asia & Pacific	Observations	9	9	9	9	9
	GDP/capita	3554.07	4308.22	4816.67	5460.29	6230.52
	Income Gini	37.26	38.89	38.53	38.60	40.04
Latin America	Observations	17	17	17	17	17
	GDP/capita	2799.40	3213.91	3587.54	3505.84	3520.17
	Income Gini	57.24	50.93	49.77	49.06	50.16
Mid-East & N. Africa	Observations	6	6	6	6	6
	GDP/capita	2932.57	3755.43	4391.93	4150.70	3980.92
	Income Gini	43.67	41.65	41.90	42.95	38.17
North America	Observations	2	2	2	2	2
	GDP/capita	11114.80	12720.90	14346.60	15145.70	17247.90
	Income Gini	35.61	35.28	35.91	35.12	36.54
Sub-Sah. Africa	Observations	7	7	7	7	7
	GDP/capita	838.20	894.31	947.91	889.80	822.48
	Income Gini	39.00	-	44.00	41.21	35.75
South Asia	Observations	4	4	4	4	4
	GDP/capita	1014.45	972.65	1094.55	1287.20	1474.65
	Income Gini	33.30	33.32	35.37	36.68	33.57
Western Europe	Observations	15	15	15	15	15
	GDP/capita	7135.32	8525.07	9449.48	10130.35	11483.41
	Income Gini	37.09	34.88	30.82	29.74	30.83
Total	Observations	60	60	60	60	60
	GDP/capita	3939.27	4656.86	5202.31	5454.50	5970.10
	Income Gini	40.63	39.32	38.51	36.91	38.58

Source: Klaus Deininger and Pedro Olinto (2000)

In the table, we can see the data about GDP per capita and income Gini for some five year periods. From this table, it could be said that for some regions income Gini decreased when GDP per capita increased but on the other hand, some regions had experienced with increasing income Gini when GDP per capita increased. Probably, we can not conclude the exact general conclusion whether there is a link between growth and inequality or not.

Now, the question is whether these empirical debates extend widely and the interpretation has just come up with the result that there is negative correlation between growth and inequality or no correlation between growth and inequality? If so, whether there is no relationship between growth and income inequality or even there is a negative correlation between them, perhaps through indirect mechanism like distributional dynamics, economic growth

will give the opportunity for poor people to participate in the economy. It will encourage the reduction of the poor - rich gap and finally reduce inequality of income distribution.

This argument arises from the fact that economic growth can reduce poverty significantly and the fact that inequality of income distribution is mostly problem within the poor society. So that, if growth can promote poverty alleviation, it might be said that through the mechanism or the policy that has the objective to reduce poverty, it can also indirectly reduce the gap between rich and poor in society. This argument is supported by the results of Deininger and Squire's research (1998). They concluded that there is a negative effect of initial inequality on long-term growth. In other words, that the pre condition could be the inequality in the economy and through some mechanism, it will have an effect on growth in the future.

It can be suggested that this mechanism is rapid economic growth and targeted poor policy which gives more opportunity to poor people to be involved in development. Some scholars suggest some possible mechanisms. The first possible mechanism is improving investment. It is believed that improving investment, especially for low level income people can result in increasing human and physical capital which in turn gives benefits for poor people and reduces the gap between poor and rich

society (Deininger and Squire 1998). Besides that, an implied redistributive policy through credit market mechanisms will improve the ability of the poor on growth. I think that these mechanisms must surely be added to the countries' policies regarding income distribution.

#### **D. Conclusion And Policy Considerations**

Inequality and growth has always become issue in economic development between argument that found there is negative relationship between growth and inequality and arguments that said there is no relationship between them. The discussion now should be not on whether there is a relationship or not but it should emphasize the inequality in the poorest society. How can the mechanism improve the condition of the poor significantly, so that it will reduce the gap between the rich and the poor and support income distribution?

Two possible policy mechanisms. They are improving investment and credit market as a part of targeted poor policy are believed to be policies that will result in growth in the future and promote more equal distribution in the economy. In addition, the World Bank (2000) suggests that mix policy between stable monetary, and openness to international trade and moderate government size could be the best policies to support growth, especially in the developing countries.

However, these policies will give advantages when the countries have effective institutions, political and social structures (World Bank 2000). These conditions will ensure the institutions can deliver the services to the poor and give

opportunities to the poor to be involved in development and reduce the gap between the poor and the rich. Perhaps then income distribution will be more equal in the future.

## References

- Adelman, I. And Robinson, S. (1989). "Income Distribution and Development", in Chenery H. and T.N. Srinivasan, eds. *Handbook of Development Economics*, New York: North Holland
- Aghion, P. and Bolton, P. (1997). 'A Theory of Trickle Down Growth and Development'. *Review of Economic Studies*, 64: 151-172
- Alesina, A. and Rodrik, D. (1994). 'Distributive Politics and Economic Growth', *The Quarterly Journal of Economics*. 109:465-489
- Barro, R.J. (1999). 'Inequality, Growth, and Investment'. *NBER Working Paper*. (7038)
- Birdsall, N. and Londono, J.L. (1997). 'Asset Inequality Matters: An Assessment of The World Bank's Approach to Poverty Reduction'. *AEA Papers and Proceedings*
- \_\_\_\_\_, Ross, D. and Sabbot, R. (1995). 'Inequality and Growth Reconsidered: Lessons from East Asia'. *The World Bank Economic Review*. 9(3):477-508
- Clarke, G. (1992). 'More Evidence on Income Distribution and Growth'. *Policy Research working Papers*. WPS 1064
- \_\_\_\_\_, and Olinto, P. (2000). *Asset distribution, inequality, and growth*. World Bank
- Deininger, K. and Squire, L. (1998). 'New ways of looking at old issues: inequality and growth', *Journal of Development Economics*. 57:259-287
- \_\_\_\_\_, and Squire, L. (1997). 'Economic Growth and Income Inequality: Reexamining the Links', *Finance & Development* [online]: March 1997 [cited March 26, 2001]. Available from Internet: <http://www.worldbank.org/fandd/english/o397/articles/0140397.htm>
- Ferreira, F. (1999). *Inequality and Economic Performance* [online]: June 1999 [cited March 27, 2001]. Available from Internet: <http://www.worldbank.org/poverty/inequal/index.htm>.



- Field, G.S. (1989). 'Changes in Poverty and Inequality in Developing Countries'. *Research Observer*. 4(2):167-185
- Persson, T. and Tabellini, G. (1994). 'Is Inequality Harmful for Growth?'. *The American Economic Review*. 84(3):600-621
- Ravallion, M. and Chen, S. (1997). 'What Can New Survey Data Tell Us about Recent Changes in Distribution and Poverty?'. *World Bank Economic Review*, 11(2): 357-82.
- Todaro, M.P. (1994). *Economic Development*. New York : Longman Publishing
- World Bank. (2000). *Poverty, Growth and Inequality* [online]: September 2000 [cited March 27, 2001]. Available from internet: <http://www.worldbank.org/poverty/data/trends/inequal.htm>.
- \_\_\_\_\_. (2000). *What exactly is inequality? An Introduction* [online]: Feb. 2000 [cited March 27, 2001]. Available from Internet: <http://www.worldbank.org/html/extdr/pb/pbpovgrowth.htm>.
- \_\_\_\_\_. (2001). *Income Poverty, Trends in inequality* [online]: Feb. 2001 [cited March 26, 2001]. Available from Internet: <http://www.worldbank.org/poverty/data/trends/inequal.htm>